

## ABSTRACT

A variable gain amplifier includes an input stage that receives an input signal and converts the input signal into a corresponding intermediate signal. An output stage provides an output signal based on the intermediate signal and a gain control signal, with a feedback signal being provided to the input stage as a function of the gain control signal, so that the intermediate signal varies as a function of the input signal and the feedback signal. The linearity performance of the VGA is substantially constant at the output over the useful input range of signal amplitudes.